SECTION 1060

ELECTRICAL CONDUIT

1060.1 Rigid Metallic Conduit and Tubing. This specification covers (1) zinc coated rigid steel conduit, (2) intermediate metal conduit, (3) rigid aluminum conduit, (4) zinc coated electrical metallic tubing and (5) fittings for rigid metal conduit, intermediate metal conduit and electrical metallic tubing.

1060.1.1 Rigid Steel Conduit, Zinc Coated. This material shall conform to the requirements of ANSI C80.1, except the conduit shall be galvanized on both the inside and the outside surfaces by the hot-dip process. The weight (mass) of zinc coating shall be not less than 0.5 ounce per square foot (0.15 kg/m^2) of actual coated surface determined in accordance with AASHTO T 65. The zinc coating shall meet the requirements for ductility regardless of the time of manufacture of the conduit. The interior or exterior surfaces or both, may be given a coating of suitable material to facilitate installation of wires and cables and to permit the conduit to be readily distinguished from pipe used for other than electrical purposes.

1060.1.2 Intermediate Metal Conduit. This material shall conform to the requirements of UL 1242. The exterior surface shall be galvanized. The weight (mass) of zinc coating shall be not less than 0.5 ounce per square foot (0.15 kg/m^2) of actual coated surface determined in accordance with AASHTO T 65. The zinc coating shall meet the ANSI C80.1 requirements for ductility. The interior surface shall be coated in accordance with UL 1242. The interior and exterior surfaces, or both, may be given a coating of suitable material to facilitate installation of wires and cables and to permit the conduit to be readily distinguished from pipe used for other than electrical purposes.

1060.1.3 Rigid Aluminum Conduit. This material shall conform to the requirements of ANSI C80.5.

1060.1.4 Electrical Metallic Tubing, Zinc Coated. This material shall conform to the requirements of ANSI C80.3 except the weight (mass) of zinc coating shall be not less than 0.5 ounce per square foot (0.15 kg/m^2) of coated surface, as determined in accordance with AASHTO T 65. The zinc coating shall meet the requirements for ductility regardless of the time of manufacture of the tubing.

1060.1.5 Fittings for Rigid Metal Conduit and Electrical Metallic Tubing. Fittings shall conform to the requirements of ANSI C80.4.

1060.1.6 Fittings for Intermediate Metal Conduit. Fittings shall conform to the requirements of UL 1242, except the coating shall meet the same requirements as the conduit with which the fittings are used.

1060.1.7 Inspection. Conduit, tubing and fittings will be inspected for compliance with the specifications, and any desired samples will be taken at either the project location or warehouse, at the option of the engineer. Test specimens for determination of weight (mass) of coating will be not less than 2 inches (50 mm) long, cut not less than 6 inches (150 mm) from the end of the length of conduit or tubing selected for testing. If the prescribed two

additional samples for retests are taken, and either does not comply, the lot represented will be rejected.

1060.1.8 Certifications. If requested by the engineer, the contractor shall furnish a manufacturer's certification in triplicate, showing typical test results representative of the material, and certifying that the material supplied conforms to all of the requirements specified.

1060.2 Rigid Nonmetallic Conduit . Rigid nonmetallic conduit shall be made of either polyvinyl chloride (PVC) or heavy duty polyethylene (PE).

1060.2.1 PVC Conduit. PVC conduit, bends, couplings and fittings shall conform to the requirements of Underwriters Laboratories Standard UL 651.

1060.2.2 Heavy Duty PE Conduit. Heavy duty PE conduit shall conform to the requirements of ASTM D 3035 SDR11.

1060.2.3 Inspection. The material will be inspected for compliance with the specifications, and desired samples will be taken at either the project location or warehouse, at the option of the engineer.

1060.2.4 Certification. The contractor shall furnish a manufacturer's certification, in triplicate, certifying that the material supplied conforms to all the requirements specified. If requested by the engineer, the contractor shall also furnish typical test results representative of the material.